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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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LUMEN INTELLECTUAL PROPERTY SERVICES, INC.
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EXAMINER

CORRIELUS, JEAN M

ART UNIT	PAPER NUMBER
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2162

DATE MAILED: 07/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/646,331

Applicant(s)

KAMVAR ET AL.

Examiner

Jean M. Corielus

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☒ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This office action is in response to the application filed on August 25, 2003, in which claims 1-28 are presented for examination.

Information Disclosure Statement

2. The information disclosure statement (IDS) filed on June 20, 2005 complies with the provisions of M.P.E.P 609. It has been placed in the application file. The information referred to therein has been considered as to the merits.

Drawings

3. Applicants are required to furnish the formal drawings in response to this office action if ***the formal drawings have not been submitted***. No new matter may be introduced in the required drawings. Failure to timely submit a drawing will result in ABANDONMENT of the application.

Claim Objections

4. Claim 1 objected to because of the following informalities: claim 1 line14, please insert -and- after "nodes;". Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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6. Claim 1-28 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 recites the limitation "each component" in line 5 and 8. There is no plurality of component previously mentioned in the claim. It is not sure as to where each component is from. Claim 11 recites in lines 4 "k subsets" and line 6 "k local rank vector". It is not clear as to what applicant refers by "K". Applicants are suggested to define the variable K recited in the claim. Claim 27 line 3 recites "portioning nodes of the linked database into subsets according to a classification of the nodes". It is not to one having ordinary skill in the art how the nodes are partitioning based on a classification of the nodes without knowing how the nodes are been classified. An amendment to the claims is necessary to clarify the 112 rejection set forth above.

Claim Rejections - 35 USC § 101

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8. Claims 1-28 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter, specifically, as directed to an abstract idea.

Claims 1-28 in view of **MPEP section 2106 IV.B.2. (b)** define non-statutory processes because they merely manipulate an abstract idea without a claimed limitation to a practical application. The language of the claim raises a question as to whether the claim is directed merely to an abstract idea that is not tied to a technological art, environment or machine which would result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101. Data structure not claimed as

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embodied in computer-readable media is descriptive material per SE and is not statutory because they are neither physical nor statutory processes. Structural and functional interrelationship with a general-purpose computer for permitting claimed functions to be realized are not provided in the claims. In contrast, a claimed system should define structural and functional interrelationships between data structures or functional parts and a computer system which permit the data functions to be realized, and is statutory. Thus, the claimed are rejected as being non-statutory. Additionally, the invention, as claimed, is directed to the manipulation of an abstract idea with no practical application in the technology arts.

The Supreme Court has repeatedly held that abstractions are not patentable. "An idea of itself is not patentable". Rubber-Tip Pencil Co. V. Howard, 20 wall. 498, 07. Phenomena of nature, though just discovered, mental processes, abstract intellectual concepts are not patentable, as they are the basis tolls of scientific and technological work Gottschalk V. Benson, 175 USPQ 673, 675 (S Ct 1972). It is a common place that laws of nature, physical phenomena, and abstract ideas are not patentable subject matter Parker V. Flook, 197 USPQ 193, 201 (S Ct 1978). A process that consists solely of the manipulation of an abstract idea is not concrete or tangible. See In re Wamerdam, 33 F.3d 1354, 1360, 31 USPQ2d 1754, 1754, 1759 (Fed. Cir. 1994). See also Schrader, 22 F.3d at 295, 30 USPQ2d at 1459.

The claimed invention as a whole must accomplish a practical application. That is, it must produce a "useful, concrete and tangible result." State Street, 149 F.3d at 1373, 47 USPQ2d at 1601-02. The purpose of this requirement is to limit patent protection to inventions that possess a certain level of "real world" value, as opposed to subject matter that represents nothing more than an idea or concept, or is simply a starting point for future investigation or research

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(*Brenner v. Manson*, 383 U.S. 519, 528-36, 148 USPQ 689, 693-96); *In re Ziegler*, 992, F.2d 1197, 1200-03, 26 USPQ2d 1600, 1603-06 (Fed. Cir. 1993)). Accordingly, a complete disclosure should contain some indication of the practical application for the claimed invention, i.e., why the applicant believes the claimed invention is useful.

Apart from the utility requirement of 35 U.S.C. 101, usefulness under the patent eligibility standard requires significant functionality to be present to satisfy the useful result aspect of the practical application requirement. See *Arrhythmia*, 958 F.2d at 1057, 22 USPQ2d at 1036. Merely claiming nonfunctional descriptive material stored in a computer-readable medium does not make the invention eligible for patenting. For example, a claim directed to a word processing file stored on a disk may satisfy the utility requirement of 35 U.S.C. 101 since the information stored may have some "real world" value. However, the mere fact that the claim may satisfy the utility requirement of 35 U.S.C. 101 does not mean that a useful result is achieved under the practical application requirement. The claimed invention as a whole must produce a "useful, concrete and tangible" result to have a practical application.

Claim 1 represents an abstract idea, which do not provide a practical application in the technological arts. There is no manipulation of data nor there any transformation of data from one state to another being performed in "A method for computing ranks in a linked database" in claim 1. Actually, no post computer process activity is found in the technological arts. The method for computing ranks in a linked database is not a physical transformation. Thus, no physical transformation is performed, no practical application is found in the claims. Such managing data as claimed can be done in a piece of paper, where one having ordinary skill in the art would produce a random number a data record and compare that random number with the

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previously random number in the sheet. Also, the claims do not appear to correspond to a specific machine or manufacture disclosed within the specification and thus encompass any product of the class configured in any manner to perform the underlying process, and are thus rejected as being directed. Claim 1 is not **tangibly embodied** in a manner so as to **be executable** as the only hardware is in an intended use statement. Therefore, claim 1 is directed to an abstract idea that is not tied to a technological art, environment or machine which would result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101. Applicant is advised to amend the claims by specifying the claim being directed to a practical application and producing a tangible result **being executed** by a general-purpose computer in order to correct the above indicated deficiencies.

The dependent claims 2-10 are rejected for fully incorporating the errors of their respective base claims by dependency. Thus, claims 2-10 are merely abstract idea and are being processed without any links to a practical result in the technology arts and without computer manipulation. They are not **tangibly embodied** in a manner so **as to be executable** as the only hardware is in an intended use statement.

Claim 11 represents an abstract idea, which do not provide a practical application in the technological arts. There is no manipulation of data nor there any transformation of data from one state to another being performed in "A method for computing a rank value for a node in a linked database" in claim 11. Actually, no post computer process activity is found in the technological arts. The method for computing a rank value for a node in a linked database is not

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a physical transformation. Thus, no physical transformation is performed, no practical application is found in the claims. Such managing data as claimed can be done in a piece of paper, where one having ordinary skill in the art would produce a random number a data record and compare that random number with the previously random number in the sheet. Also, the claims do not appear to correspond to a specific machine or manufacture disclosed within the specification and thus encompass any product of the class configured in any manner to perform the underlying process, and are thus rejected as being directed. Claim 11 is not **tangibly embodied** in a manner so as to **be executable** as the only hardware is in an intended use statement. Therefore, claim 11 is directed to an abstract idea that is not tied to a technological art, environment or machine which would result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101. Applicant is advised to amend the claims by specifying the claim being directed to a practical application and producing a tangible result **being executed** by a general-purpose computer in order to correct the above indicated deficiencies.

The dependent claims 12-26 are rejected for fully incorporating the errors of their respective base claims by dependency. Thus, claims 12-26 are merely abstract idea and are being processed without any links to a practical result in the technology arts and without computer manipulation. They are not **tangibly embodied** in a manner so **as to be executable** as the only hardware is in an intended use statement.

Claim 27 represents an abstract idea, which do not provide a practical application in the technological arts. There is no manipulation of data nor there any transformation of data from one state to another being performed in “A method for computing a rank value for a block of nodes in a linked database” in claim 27. Actually, no post computer process activity is found in the technological arts. The method for computing a rank value for a block of nodes in a linked database is not a physical transformation. Thus, no physical transformation is performed, no practical application is found in the claims. Such managing data as claimed can be done in a piece of paper, where one having ordinary skill in the art would produce a random number a data record and compare that random number with the previously random number in the sheet. Also, the claims do not appear to correspond to a specific machine or manufacture disclosed within the specification and thus encompass any product of the class configured in any manner to perform the underlying process, and are thus rejected as being directed. Claim 27 is not **tangibly embodied** in a manner so as to **be executable** as the only hardware is in an intended use statement. Therefore, claim 27 is directed to an abstract idea that is not tied to a technological art, environment or machine which would result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101. Applicant is advised to amend the claims by specifying the claim being directed to a practical application and producing a tangible result **being executed** by a general-purpose computer in order to correct the above indicated deficiencies.

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The dependent claim 28 is rejected for fully incorporating the errors of their respective base claims by dependency. Thus, claim 28 is merely abstract idea and is being processed without any links to a practical result in the technology arts and without computer manipulation. It is not **tangibly embodied** in a manner so as to be executable as the only hardware is in an intended use statement.

9.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

12. Claims 1-7, 9-17 and 22-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Page US Patent no. 6,285,999 and Kleinberg US Patent no. 6,112,202.

As to claim 1, Page disclose the claimed “obtaining a local rank vector associated with a selected subset of nodes in the linked database, wherein each component of the local rank vector

represents a local rank of a node in the selected subset of nodes” (fig.3, item 105; col.3, lines 56-66; col.6, lines 15-33); “obtaining a block rank vector associated with the linked database, wherein each component of the block rank vector represents a block rank of a subset of nodes in the linked database” (col.5, lines 15-35 and lines 60-67; col.6, lines 50-67); “selecting a component of the block rank vector corresponding to the selected subset of nodes” (col.4, lines 40-63; col.5, lines 10-58; col.7, lines 30-55); “selecting a component of the local rank vector corresponding to a selected node in the selected subset of nodes” (col.4, lines 40-63; col.5, lines 10-58; col.7, lines 30-55); “combining the selected component of the block rank vector and the selected component of the local rank vector to obtain a global rank for the selected node” (col.7, lines 38-65; col.8, lines 30-40; col.5, lines 45-67; col.6, lines 13-60). However, Page does not explicitly disclose the claimed “wherein the subset is one of a plurality of subsets of nodes defined by a partition of the nodes in the linked database”. On the other hand, Kleinberg discloses the claimed “wherein the subset is one of a plurality of subsets of nodes defined by a partition of the nodes in the linked database” (col.11, lines 50-58; col.10, lines 56-67; col.7, lines 2-10). It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the teaching of the cited references, wherein the linked database provided therein (see Page’s fig.3) would incorporate the use of partitioning nodes of the linked database into K subsets according to a classification of the nodes, as the same conventional manner as disclosed by Kleinberg col.11, lines 50-58; col.10, lines 56-67; col.7, lines 2-10. One having ordinary skill in the art would have found it motivated to utilize such a combination in order to allow user to efficiently obtain desired information of interest.

As to claim 2, Page discloses the claimed “wherein obtaining the local rank vector comprises receiving the local rank vector from a computer that calculated the local rank vector” (col.5, lines 15-35 and lines 60-67; col.6, lines 50-67).

As to claim 3, Page discloses the claimed “wherein obtaining the local rank vector comprises selecting components of a preexisting global rank vector. (Col.5, lines 14-16).

As to claim 4, Page discloses the claimed “wherein obtaining the local rank vector comprises forming a local link matrix comprising link weights between nodes of the selected subset and computing the local rank vector from the local link matrix” (col.4, lines 55-67; col.5, lines 5-35).

As to claim 5, Page discloses the claimed “classifying the nodes of the linked database into subject classes and creating the partition of the nodes into the plurality of subsets in accordance with the subject classes”.

As to claim 6, Page discloses the claimed “obtaining a plurality of local rank vectors associated with the plurality of subsets” (col.5, lines 45-63).

As to claim 7, Page discloses the claimed “wherein obtaining the block rank vector comprises forming a reduced link matrix for the linked database and computing the block rank vector from the reduced link matrix” (col.6, lines 50-67).

As to claim 9, Page discloses the claimed “calculating a final rank from the global rank using an iterative link-based ranking technique” (col.6, lines 15-60).

As to claim 10, Page discloses the claimed “determine an order of presentation of the selected node among other nodes”(col.3, lines 55-67).

As to claims 5 and 11, Page discloses the claimed “computing K local rank vectors for the K subsets of the nodes” (col.6, lines 13-60); “computing a block rank vector from a KXK reduced link matrix” (col.6, lines 13-20); “computing a global rank vector from the local rank vector and the block rank vector” (col.5, lines 13-35); and “selecting a component of the global rank vector corresponding to the node to obtain the rank value for the node” (col.6, lines 13-32). However, Page does not explicitly disclose the claimed “partitioning nodes of the linked database into K subsets according to a classification of the nodes”. On the other hand, Kleinberg discloses the claimed “partitioning nodes of the linked database into K subsets according to a classification of the nodes” (col.11, lines 50-58; col.10, lines 56-67; col.7, lines 2-10); and “classifying the nodes of the linked database into subject classes and creating the partition of the nodes into the plurality of subsets in accordance with the subject classes” (col.11, lines 50-58; col.10, lines 56-67; col.7, lines 2-10). It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the teaching of the cited references, wherein the linked database provided therein (see Page’s fig.3) would incorporate the use of partitioning nodes of the linked database into K subsets according to a classification of the nodes, as the same conventional

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manner as disclosed by Kleinberg col.11, lines 50-58; col.10, lines 56-67; col.7, lines 2-10. One having ordinary skill in the art would have found it motivated to utilize such a combination in order to allow user to efficiently obtain desired information of interest.

As to claim 12, Kleinberg discloses the claimed “arranging a link matrix for the linked database into a block-diagonal form corresponding to the partition of the nodes into subsets (col.11, lines 50-58; col.10, lines 56-67; col.7, lines 2-10) and Page discloses the claimed “forming K local link matrices from blocks of the link matrix” (col.7, lines 38-65; col.8, lines 30-40; col.5, lines 45-67; col.6, lines 13-60); and “computing the K local rank vectors from the K local link matrices” (col.6, lines 15-60).

As to claim 13, Page discloses the claimed “executing a link-based ranking algorithm on a local link matrix” (col.7, lines 38-65; col.8, lines 30-40; col.5, lines 45-67; col.6, lines 13-60).

As to claim 14, Kleinberg discloses the claimed “calculating a principal eigenvector of the local link Matrix” (col.11, lines 36-55).

As to claim 15, Kleinberg discloses the claimed “performing a singular value decomposition of the local link matrix” (col.11, lines 50-58; col.10, lines 56-67; col.7, lines 2-10).

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As to claim 16, Page discloses the claimed “forming a vector representing the row sums or columns sums of the matrix” (col.7, lines 38-65; col.8, lines 30-40; col.5, lines 45-67; col.6, lines 13-60).

As to claim 17, Page discloses the claimed “dividing a preexisting global rank vector into K parts” (col.5, lines 10-33).

As to claim 22, Page discloses the claimed “wherein computing the K local rank vectors is performed at K distributed computers, and wherein computing the global rank vector is performed at a central computer” (col.6, lines 13-60).

As to claim 23, Page discloses the claimed “wherein the linked database is a distributed collection of hypertext documents and the classification of the nodes is based on URI, addresses of the nodes” (col.3, lines 55-65).

As to claim 24, Page discloses the claimed “wherein the classification of the nodes is a predetermined subject classification of documents in the linked database” (col.4, lines 13-67; col.5, lines 10-58).

As to claim 25, Page discloses the claimed “wherein the classification of the nodes is computationally determined from a link structure of the linked database” (col.4, lines 13-67; col.5, lines 10-58).

As to claim 26, Page discloses the claimed “wherein the classification of the nodes is computationally determined from a similarity of content associated with nodes” (col.4, lines 13-67; col.5, lines 10-58).

13. Claims 8, 18-21 and 27-28 rejected under 35 U.S.C. 103(a) as being unpatentable over Page and Kleinberg as applied to claims 1-7, 9-17 and 22-26 above, and further in view of Gabriel et al., (hereinafter “Gabriel”) US Patent No. 6,584,468.

As to claim 27, Page discloses the claimed “computing K local rank vectors for the K subsets of the nodes” (col.6, lines 13-60); “computing a block rank vector from the reduced link matrix” (col.6, lines 13-20); “computing a global rank vector from the local rank vector and the block rank vector” (col.5, lines 13-35); and “selecting a component of the block rank vector corresponding to the node to obtain the rank value for the node” (col.6, lines 13-32). However, Page does not explicitly disclose the claimed “partitioning nodes of the linked database into subsets according to a classification of the nodes”. On the other hand, Kleinberg discloses the claimed “partitioning nodes of the linked database into subsets according to a classification of the nodes” (col.11, lines 50-58; col.10, lines 56-67; col.7, lines 2-10). It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the teaching of the cited references, wherein the linked database provided therein (see Page’s fig.3) would incorporate the use of partitioning nodes of the linked database into K subsets according to a classification of the nodes, as the same conventional manner as disclosed by Kleinberg col.11, lines 50-58; col.10, lines 56-67; col.7, lines 2-10. One having ordinary skill in the art

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would have found it motivated to utilize such a combination in order to allow user to efficiently obtain desired information of interest. Neither Page nor Kleinberg discloses the claimed “forming a reduced link matrix whose elements represent links between subsets of the partition”.

On the other hand, Gabriel discloses an analogous system for ranking documents using a predetermining weighting algorithm. In particular, Gabriel discloses the claimed “forming a reduced link matrix whose elements represent links between subsets of the partition”

(Col.6, lines 14-32, lines 52-65; col.7, lines 1-10; col.8, lines 6-16, lines 46-67; col.9, lines 38-62; col.10, lines 11-38). It would have been obvious to one having ordinary skill in the art at the time the invention was to combine the teaching of the cited references, wherein the linked database provided therein (see Page’s fig.3) would incorporate the use of modifying the ranking function, in the same conventional manner as disclosed by Gabriel (col.6, lines 14-32, lines 52-65; col.7, lines 1-10; col.8, lines 6-16, lines 46-67; col.9, lines 38-62; col.10, lines 11-38). One having ordinary skill in the art would have found it motivated to modify the ranking function in order to determine whether a document is relevant to a given user interest.

As to claims 8, 18-21 and 28, Page and Kleinberg disclose substantially the invention as claimed, except for the claimed feature “using a set of preference weights associated with the subsets to alter elements of the reduced link matrix so that the block rank vector is customized in accordance with the preference weights”, “ forming a reduced link matrix whose elements represents links...”; and “adding together weights of links from nodes in the first blocks to nodes

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in the second block". On the other hand, Gabriel discloses an analogous system for ranking documents using a predetermining weighting algorithm. In particular, Gabriel discloses the claimed "using a set of preference weights associated with the subsets to alter elements of the reduced link matrix so that the block rank vector is customized in accordance with the preference weights" (col.6, lines 14-32, lines 52-65; col.7, lines 1-10; col.8, lines 6-16, lines 46-67; col.9, lines 38-62; col.10, lines 11-38); and "forming a reduced link matrix whose elements represents links..." (col.6, lines 14-32, lines 52-65; col.7, lines 1-10; col.8, lines 6-16, lines 46-67; col.9, lines 38-62; col.10, lines 11-38); and "adding together weights of links from nodes in the first blocks to nodes in the second block" (col.6, lines 14-32, lines 52-65; col.7, lines 1-10; col.8, lines 6-16, lines 46-67; col.9, lines 38-62; col.10, lines 11-38). It would have been obvious to one having ordinary skill in the art at the time the invention was to combine the teaching of the cited references, wherein the linked database provided therein (see Page's fig.3) would incorporate the use of modifying the ranking function, in the same conventional manner as disclosed by Gabriel (col.6, lines 14-32, lines 52-65; col.7, lines 1-10; col.8, lines 6-16, lines 46-67; col.9, lines 38-62; col.10, lines 11-38). One having ordinary skill in the art would have found it motivated to modify the ranking function in order to determine whether a document is relevant to a given user interest.

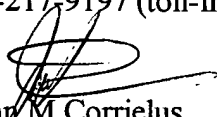
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Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean M. Corrielus whose telephone number is (571) 272-4032. The examiner can normally be reached on 10 hours shift.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jean M Corrielus
Primary Examiner
Art Unit 2162

July 8, 2005